## ASSIGNMENT 2

Textbook Assignment: "Basic Equipment", chapter 2, pages 2-1 through 2-71.

- 2-1. You should maintain drafting shop 2-7. What type of table covering is best tools in what condition?
  - 1. Locked up
  - 2. Out of sight

  - Out of sight
     Clean and uncluttered
     Ready for use on the table
- what type of abuse?

  - Dirt
     Loans
     Misadjustment
  - 4. Nicks and lacerations
- good practice for you to do what to a drafting table?

  2-9. You should cover a tabletop recently recovered to the recently recently recovered to the recently recovered to the recently To protect the tabletop, it is a a drafting table?
  - Place it out of traffic areas
     Put a cover on it

  - 3. Paint it
  - 4. Avoid using it
- 2-4. What is the primary purpose of a worktable?

  - To prepare tracings
     To place additional reference material on
  - 3. To use as a temporary workstation at a remote site
  - the drafting table
- You can seriously injure yourself with a light table by using its 2-5. glass surface to perform which of the following activities?
  - 1. Tracing prints

  - 2. Leaning against it 3. Drawing pictures 4. Assembling negatives
- 2-6. A tabouret serves which of the following functions?
  - 1. As workstation at a site away from the shop

    2. As additional reference
  - material
  - 3. As a coffee mess station4. As a storage unit

- suited for permanent application?
  - 1. Cork
  - 2. Mylar

  - 3. Vinyl 4. Cellulose acetate paper
- You must be especially cautious to 2-8. What table covering, if applied protect drafting equipment from incorrectly, will snap a drawing incorrectly, will snap a drawing board?

  - Cork
     Mylar
     Vinyl
     Cellulose acetate paper
  - recently recovered with cork for additional protection.

    - 1. True 2. False
  - 2-10. One of the key considerations in your selection of a drafting chair should be what feature?
    - 1. Arms

    - 2. Color 3. Rollers 4. Comfort
- workstation at a remote site 2-11. When you arrange light for a left-4. To keep your personal gear off handed draftsman the light for a lefthanded draftsman, the light source should emanate from what direction?

  - Back
     Upper left
     Upper right
     Directly overhead
  - 2-12. You should attach a light source to a table based on the right- or left-handedness of the DM for what reason?
    - 1. To minimize shadows cast by the DM's hands
      - 2. To keep the light out of the DM's way
    - 3. To avoid conflict with the straightedge
    - 4. To keep the working side of the table free of clutter

- operating temperature?
  - 5 minutes
  - 2. 10 minutes
  - 3. 15 minutes
  - 4. 20 minutes
- A tabletop waxer should be a minimum of how full before you turn 2-14. it on?
  - 1. 1/4 full
  - 2. 1/3 full
  - 3. 1/2 full
  - 4. 2/3 full
- 2-15. Exactly, how many times should you run a sheet of paper through a waxer to ensure even coverage?

  - 1. One 2. Two
  - 3. Three
  - 4. Four
- 2-16. What amount of time should you wait after changing the temperature setting on a tabletop waxer before running your paper through again?
  - 10 minutes
  - 2. 20 minutes
  - 3. 30 minutes
  - 4. 40 minutes
- 2-17. When using a paper cutter, individuals tend to make what common mistake?

  - Cutting film
     Cutting cardstock
- You should draw the cutting arm down on a paper cutter in what 2-18. manner?
- 2-19. Your failure to engage the safety catch at the base of the paper cutter will result in damage to what component?

  - 3. The tabletop
  - 4. The safety catch

- 2-13. Approximately what minimum time does it take a hand waxer to reach operating temperature?

  2-20. A drafting machine combines the functions of which of the following equipment? functions of which of the following pieces of drawing equipment?
  - Straightedge, scale, and dividers
  - 2. Template, T-square, and straightedge
  - 3. parallel ruler, protractor, and triangle
  - 4. Radius curves, template, and straightedge
  - 2-21. You attach the removable scales to the scale mechanism of a drafting machine by what means?
    - 1. Phillips head screws
    - 2. Dovetail fittings
    - 3. Elongated screws
    - 4. Pipe fittings
  - 2-22. The elongated screws that hold the dovetail fittings to the scales of a drafting machine serve what purpose?
    - 1. To attach the scales
    - 2. To adjust the scale length
    - 3. To make slight angular adjustments
    - 4. To align the scale on the drafting board
  - Which of the following is/are 2-23. advantage(s) of the parallel straightedge?
    - 1. Ideal use in tight quarters
    - 2. Simple to adjust and care for
    - 3. Useable by both left- and right-handed DMs
    - 4. Each of the above
  - 3. Cutting too much material
    4. Cutting too little material
    2-24. The most commonly used T-square has a blade of what length?
    - 1. 15 inches
    - 2. 24 inches
    - 3. 36 inches 4. 42 inches
  - 1. Slowly in one stroke
    2. Swiftly in one stroke
    3. Swiftly in rapid strokes
    4. 42 inches
    5. What should you do when a T-square becomes out of true or damaged?
    - 1. Hang it up
    - 2. Tell the LPO
    - 3. Throw it away
    - 4. Sand down the edge
  - 1. The spring mechanism
    2-26. How should you store a T-square when you are not using it?
    - 1. Leave it hanging up
    - 2. Place it upright in a corner
    - 3. Place it under the tabletop
    - 4. Place it on a shelf in a locker

- straightedge?
  - To cut straight lines
     To draw straight lines

  - 4. To weigh down paper
- Why should you store drafting 2-36. instruments in their original case? 2-28.
  - 1. To present a neat and orderly appearance
  - To have a place to put them in
  - 3. To protect the instruments from corroding
  - 4. To keep the instruments out of sight
- 2-29. What is the purpose of proportional dividers?

  - 1. To draw circles
    2. To transfer meas
  - To transfer measurements
     To step off equal distances
  - 4. To transfer irregular curves
- 2-30 dividers?
  - To transfer irregular curves
    To step off equal distances

  - To divide arcs and circles
  - 4. To draw circles
- 2-31. What is the purpose of a compass?

  - To draw arcs and circles
     To draw irregular curves
  - 3. To divide arcs and circles
  - 4. To step off equal distances
- What distance beyond the leg of the 2-32. compass or divider should the needlepoint project?
  - 1. 1/64 inch
  - 2. 1/32 inch
  - 3. 3/64 inch
  - 4. 1/8 inch
- What drawing instrument should you select to draw a circle exceeding 64 inches in diameter?
  - 1. A standard compass with an extension
  - 2. A hollow compass
  - A beam compass
     A drop bow
- 4. A drop bow

  1. Moisten it
  2. Oil it slightly
  What drafting instrument should you
  select to draw a circle 1/8 inch in
  4. Marinate it in ink 2-34. diameter?
  - A set of bow dividers
     A drop bow pen
     A compass
     A bow pen

- 2-27. What is the purpose of a steel 2-35. Which of the following is a feature of the Swede pen?
  - 1. Broad nibs
  - 2. Parallel nibs
  - 3. Extremely curved nibs
  - 4. Hollow handle on a swivel base
  - The contour pen is best suited for what purpose?
    - 1. To create straight lines
    - 2. To use greater ink capacity
    - 3. To create freehand, curvilinear lines
    - 4. To create parallel lines of equal or differing width
  - 2-37. Which pen should you select to draw parallel lines of equal or differing widths?

    - 1. Swede pen
      2. Detail pen
      3. Contour por

    - 3. Contour pen 4. Railroad pen
  - What is the purpose of a set of 2-38. Needlepoints for compasses and dividers are available in which of the following shapes?
    - 1. Blunt
    - 2. Tapered
    - 3. Shouldered
    - 4. Tapered and shouldered
    - 2-39. What is the purpose of a center disk?
      - 1. To stabilize the compass or dividers
      - 2. To mark the center of the item being drawn
      - 3. To prevent overenlarging a compass hole
        4. To mark the center of the
      - circle being drawn
      - 2-40. Exactly how far up the nib should you fill a pen with ink?
        - 1. 3/16 inch

        - 2. 1/2 inch 3. 9/16 inch 4. 1 inch
      - 2-41. Before using a new pen nib, what should you do to the nib surface?

- In a reservoir pen, what component 2-50. 2-42. regulates the flow of ink?
  - The feed tube
  - 2. The clamp ring
  - The conical tip 3.
  - The weighted needle
- 2-43. When you leave reservoir pen parts in an ultrasonic cleanser too long, what is the result?
  - 1. Bent nibs
  - 2. Extra clean pens
  - 3. Melted plastic parts
  - 4. Cracked plastic parts
- 2-44. You should keep uncommon tools in commonly accessible places.
  - 1. True
  - 2. False
- A combination of a 30/60- and a 45-2-45. degree triangle can produce a total of how many other angles?
  - 1. 10 2. 11

  - 3. 12
  - 4. 13
- 2-46. What type of angle is drawn with the adjustable triangle?
  - Obtuse 1.
  - 2. Regular
  - 3. Irregular
  - 4. Supplementary
- 2-47. The flat segment on a radius curve is known by what term?

  - A flat
     A radius
     A tangent A tangent
  - 4. A straightedge
- 2-48. What is the purpose of a french curve?
  - 1. To draw irregular or
  - noncircular curves
    To draw the curvature of a ship
  - To draw logarithmic curves
  - 4. To draw parabolic curves
- What is the dimension of the 2-49. minimum, radius of a flexible curve rule?

  - 1. 1 inch
    2. 1 1/2 inches
    3. 2
  - 2 1/2 inches

- When you draw an irregular curve with a french curve, to what number of points of contact should the french curve correlate?
  - One
  - 2. Two
  - 3. Three
  - 4. Four
- 2-51. Which of the following drafting instruments should you use to lay off an angle from a horizontal base?
  - 1. A T-square
  - 2. A protractor
  - 3. Dividers
  - 4. A compass
- In laying off an angle from a 2-52. horizontal base, to what number of points of reference should you use?
  - One
  - 2. Two
  - Three 3.
  - 4. Four
- 2-53. What type of material is NOT suitable for making a template for repeated or extended use?
  - 1. Heavy acetate
  - 2. Sheet metal
  - Cardboard 3.
  - 4. Paper
- 2-54. What is the purpose of an ink riser?
  - To prevent the ink from bleeding under a drawing aid
  - To prevent the DM from abrading 2. the surface of a drawing
  - 3. To allow the DM to create cleaner drawings
  - 4. To allow the DM to use a template repeatedly without wearing it down
- 2-55. What is the purpose of a scale clip?
  - To enable quick pickup of the scale
  - 2. To keep pencils within easy reach
  - 3. To focus attention on the scale face in use
  - To slide the scale along a drawing board

- 2-56. It is as convenient to measure from left to right as it is from right to left through the use of what scale?
  - Open division
  - 2. Full division
  - 3. Double numbering
  - 4. Single numbering
- What scale on a triangular architect's scale indicates full inches?
  - 1.3/16
  - 2. 1
  - 3. 3
  - 4. 16
- 2-58. What scale is ideal for making graphs or decimal measurements?
  - The architect's
  - 2. The civil engineer's
  - 3. The railroad engineer's
  - 4. The mechanical engineer's
- To measure accurately with a scale, 2-59. you should take which of the following actions?
  - 1. Lay the scale against your straightedge
  - Slide a sharp pencil lead carefully down the graduation groove
  - 3. Make the drawing surface with the increment
  - All of the above
- What is the ratio of the 2-60. measurements on the drawing to the same measurements on the actual object known as?
  - The equation
  - 2. The scale
  - 3. The ratio
  - 4. The rule
- What factor dictates the size of a 2-61. brush?
  - The bristle thickness
  - 2. The ferrule or quill
  - 3. The bristle length
  - 4. The handle
- 2-62. Red sable brushes are generally used for what medium?
  - 1. Acrylic color
  - 2. Enamel color
  - 3. Water color 4. Oil color

- 2-63 What bristle is suitable for use with oils and acrylics?
  - Ox hair 1.
  - 2. Red sable
  - Camel hair 3.
  - 4. Both 2 and 3 above
- 2-64. After cleaning brushes dedicated to oil-based paints and before storing them, what action should you take?
  - Reshape the bristles
  - 2. Curl the bristles to the right
  - Wash them thoroughly with water
  - Add a drop of oil to the bristles
- 2-65. How should you store brushes once you wash them?
  - Place them back in the desk 1. drawer
  - Place them on the bristles 2.
  - Place them upright on the handles
  - 4. Place them on a locker shelf
- 2-66. What determines the rating or grade of a pencil?
  - 1. The diameter of the lead
  - 2. The composition of the lead
  - The hardness of the lead 3.
  - 4. The composition and hardness of the lead
- 2-67. Of the following pencil grades, what is most suitable for technical or precise drawing?
  - B to 3H 1.
  - F to 2H 2.
  - 4H to 6H 3.
  - 6B to 2B
- 2-68. What is the main difference between a graphic pencil and a carbon pencil?
  - 1. A graphite pencil is dense black; a carbon pencil is not
  - A graphite pencil reflects 2. light; a carbon pencil does not
  - A carbon pencil is affected by humidity the graphite pencil is not
  - 4. A carbon pencil leaves a residue; the graphite pencil does not
- 2-69. When relative humidity is high, what pencil should you select to replace a 2B pencil?
  - 1. 2H 2. 3B 3. 4B

  - 4. 6B

- Why should you use a sky-blue 2-70. pencil to mark a board before photographing it on black-and-white film?
  - Because no colored marks reproduce on black-and-white film
  - Because sky-blue lead fades under the intense light of the camera
  - Because photographic black-andwhite films are blind to sky-
  - 4. Because sky-blue pencil leads are wax-based and melt under the camera lights
- Why must you constantly move an electric eraser over an error in a 2-71. circular pattern instead of concentrating on it?
  - To lighten the image area around the error
  - To prevent damage to the paper surface
  - 3. To keep your wrist from tiring4. To blend in the correction
- 2-72. What eraser should you use to pick out highlights in a drawing?
  - 1. A plastic eraser

  - A kneaded eraser
     An art gum eraser
     Pulverized eraser particles

- 2-73. What is the purpose of an erasing shield?
  - To isolate areas you want to erase
  - To shave eraser particles away from the drawing
  - To protect the eraser from dirt on the drawing
  - To protect the drawing surface you do not want to erase
- 2-74. What is the purpose of a stump or tortillon?
  - To blend pencil, charcoal, pastels, and crayons
    To blend color and ink washes

  - To mix binders with pigments 3.
  - 4. To mix pigments
- 2-75. To make sure you are making a clean and accurate cut, when should you change the blade in the knife?
  - Daily only
  - 2. Weekly only
  - 3. Monthly only
  - 4. As often as you feel the blade needs changing